

Listing of Claims

In the Claims:

Please cancel claims 5-8 and 14-17.

1. (Original) A data recording method for calculating a digital sum value (DSV) corresponding to a proportion of positive data and negative data included in predetermined data ranges, selecting a resync pattern to be inserted between the data ranges according to the DSV, and inserting the selected resync pattern between the data ranges, the data recording method comprising a step of selecting a resync pattern that minimizes differences in DSV between the data ranges.

2. (Original) The data recording method as claimed in claim 1, comprising the steps of:

calculating a first DSV of a first data range;
calculating a second DSV of both a second data range continuous with the first data range and a first resync pattern;
calculating a third DSV of the second data range and a second resync pattern;
selecting either the second or the third DSV depending on whichever differs less from the first DSV; and
inserting either the first resync pattern or the second resync pattern between the first data range and the second data range depending on either the second DSV or the third DSV, whichever is selected.

3. (Original) The data recording method as claimed in claim 2, wherein the second resync pattern inverts the positive data and the negative data included in the second data range.

4. (Original) The data recording method as claimed in claim 2, wherein the step of selecting either the second or the third DSV depending on whichever differs least from the first DSV

involves selecting either the second DSV or the third DSV whenever the difference between either the second or third DSV and the first DSV is less than a predetermined value.

5-8. (Canceled).

9. (Original) A data recording device for calculating a digital sum value (DSV) corresponding to a proportion of positive data and negative data included in predetermined data ranges, selecting a resync pattern to insert between the data ranges according to the DSV, and inserting the selected resync pattern between the data ranges, the data recording device comprising a unit for selecting a resync pattern that minimizes differences in DSV between the data ranges.

10. (Original) The data recording device as claimed in claim 9, comprising:
a first calculating unit for calculating a first digital sum value (DSV) of a first data range;
a second calculating unit for calculating a second DSV of both a second data range continuous with the first data range and a first resync pattern;
a third calculating unit for calculating a third DSV of the second data range and a second resync pattern;
a selecting unit for selecting either the second or the third DSV depending on whichever differs less from the first DSV; and
an inserting unit for inserting either the first resync pattern or the second resync pattern between the first data range and the second data range depending on either the second DSV or the third DSV, whichever is selected.

11. (Original) The data recording device as claimed in claim 9, wherein the second resync pattern inverts the positive data and the negative data included in the second data range.

12. (Original) The data recording device as claimed in claim 9, wherein either the second DSV or the third DSV is selected whenever the difference between either the second or third DSV and the first DSV is less than a predetermined value.

13. (Original) The data recording device as claimed in claim 9, further comprising a data range setting unit for setting a range of data to be used for calculating the first, second and third DSV.

14-17. (Canceled.)

18. (Original) An optical recording medium on which data is recorded, the data having a resync pattern inserted between predetermined data ranges according to a digital sum value (DSV) corresponding to a proportion of positive data and negative data included in the data ranges, the resync pattern being such as to minimize differences in DSV between the data ranges.

Respectfully submitted,

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